

ABSTRACT

A correlated double sampling pixel gain amplifier includes ^{an operational} ~~a main~~ amplifier, an input sampling capacitor, and a feedback capacitor. The input capacitor samples the input signal during a first time phase and the feedback capacitor ~~samples the input during a second time phase~~ ^{samples the input} during a second time phase. No sampling switch is located between the input capacitor and the input terminal. The feedback capacitor may include a capacitor array.